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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 12/07/2001 10/005,000 James H. Lee H-204145 1829 7590 02/23/2004 EXAMINER CARY W. BROOKS ALEJANDRO, RAYMOND General Motors Corporation Mail Code 482-C23-B21 ART UNIT PAPER NUMBER P.O. Box 300 1745

DATE MAILED: 02/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Advisory Action

Application No.	Applicant(s)
10/005,000	LEE ET AL.
Examiner	Art Unit
Raymond Alejandro	1745

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 January 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

	PERIOD FOR REPLY [check either a) or b)]
a) 🛚	The period for reply expires <u>3</u> months from the mailing date of the final rejection.
b) 🗌	The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).
fee have l fee under (2) as set	nsions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if ad, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).
	A Notice of Appeal was filed on Appellant's Brief must be filed within the period set forth in 67 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
	The proposed amendment(s) will not be entered because:
_	☐ they raise new issues that would require further consideration and/or search (see NOTE below);
	they raise the issue of new matter (see Note below);
(c) [
(d) [they present additional claims without canceling a corresponding number of finally rejected claims.
	NOTE:
3. 🗌 A	Applicant's reply has overcome the following rejection(s):
	lewly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
	he a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: <u>see next page</u> .
	he affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly aised by the Examiner in the final rejection.
	or purposes of Appeal, the proposed amendment(s) a) will not be entered or b)⊠ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
Т	he status of the claim(s) is (or will be) as follows:
(Claim(s) allowed: <u>1,2,7 and 8</u> .
. (Claim(s) objected to:
C	Claim(s) rejected: <u>4 and 5</u> .
	Claim(s) withdrawn from consideration:
8.□ T	he drawing correction filed on is a) approved or b) disapproved by the Examiner.
9.⊠ N	lote the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). not considered.
10. 🗌 (Other:

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DETAILED ACTION

Information Disclosure Statement

- 1. The information disclosure statement filed 02/02/04 fails to comply with 37 CFR 1.97(d) because it lacks a statement as specified in 37 CFR 1.97(e). It has been placed in the application file, but the information referred to therein has not been considered.
- 2. The information disclosure statement filed 02/02/04 fails to comply with 37 CFR 1.97(d) because it lacks the fee set forth in 37 CFR 1.17(p). It has been placed in the application file, but the information referred to therein has not been considered.

Response to Arguments

3. Applicant's arguments filed 01/29/04 have been fully considered but they are not persuasive. Applicants now contend that claim 4 is patentable over the prior art because it recites "heating the liquid to a gas using a heating source comprising a fuel cell stack". In this respect, it is noted the claim language has been interpreted as having the liquid heated to a gas using *any heating source* of the fuel cell stack power generation system. In that, it is further noted that a fuel cell stack generating system generally comprises several ancillary equipment supporting the fuel cell operation. Some of these ancillary equipment are burners, heat exchanger, combustors, and the like. Although applicants are, at this point, contending such heating source is "the single fuel cell unit" per se (i.e. the fuel cell unit standing alone) the examiner still believes the present claim language does encompass any other heat source besides "the fuel cell unit iself" which forms part of the fuel cell stack generating system; additionally, it is further asserted that "fuel cell stacks" are composed of: i) single fuel cell units, ii) separators,

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iii) flow field plates and iv) end plates, and sometimes <u>fuel cell stacks are also designed to have included therein additional heating element such as a heater, or an internal reforming unit or a very small combustor/burner which further assists the fuel cell stack for heat transfer purposes. Hence, such <u>fuel cell stack designs</u> provide <u>single fuel cell unit</u> lacking sufficient heating capacity so as to act as a heating source by itself or standing alone. Succinctly stated, the language of the rejected claims fails to define the specific of the fuel cell stack structure as to clearly set forth what the term "fuel cell stack" stands for, and ipso facto, the prior art fuel cell system satisfies the intended scope of the rejected claims. Consequently, the examiner wishes to point out that the fuel cell stack power generation system of the prior art performs exactly the identical function specified in the instant claim in substantially the same way, and produces substantially the same results as the claimed fuel cell stack of the present invention.</u>